

ABSTRACT

DATA TRANSMISSION SYSTEM

5 A data transmission system for short but frequent data pulses
comprises a transmitter (10) and a receiver (12). The transmitter comprises a
pseudo-random signal generator (16) which governs the time delay between
successive timing points and a local oscillator (15) which controls the time of
data transmission, and the receiver comprises a corresponding pseudo-
10 random signal generator (22) and local oscillator (24). Power is applied to the
receiver substantially only corresponding in time to the timing of the data
bursts. Multiple collisions between adjacent systems operating on the same
wavelength are avoided and the receiver is controlled to consume power only
around the timing of the data bursts.

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(Figure 1)